

WHAT IS CLAIMED IS:

1. A radiographic inspection apparatus incorporating a collimator device in which a plurality of radiation passages are defined, a plurality of radiation detectors for detecting radiation rays passing through the radiation passages, and a moving device for moving either the plurality of radiation detectors or the collimator device in a direction crossing the center axis of each of the radiation passages, characterized in that each of the radiation passage has a cross-sectional area in the crossing direction, is greater than that of each of the radiation detectors in that direction.
2. A radiographic inspection apparatus as set forth in claim 1, further including a tomogram forming device for creating a tomogram by using data obtained from radiation detection signals delivered from the plurality of radiation detectors.
3. A radiographic inspection apparatus as set forth in claim 1, further including a control device for controlling the moving device.
4. A radiographic inspection apparatus as set forth in claim 1, further including a rotating device for rotating the radiation detecting device around a bed on which a person to be examined is laid.
5. A radiographic inspection apparatus as set forth in claim 1, wherein the collimator device is movably attached to a pair of collimator holding

members provided in the radiation detecting device.

6. A radiographic inspection apparatus as set forth in claim 5, wherein all radiation detectors are arranged between the pair of collimator holding members.

7. A radiographic inspection apparatus incorporating a collimator device in which a plurality of radiation passages are defined, a plurality of radiation detectors for detecting radiation rays passing through the radiation passages, and a collimator moving device for moving either the plurality of radiation detectors or the collimator device in a direction crossing the center axis of each of the radiation passages, characterized in that the plurality of radiation detectors are faced to the respective radiation passages.

8. A radiographic inspection apparatus as set forth in claim 1, further including a tomogram forming device for creating a tomogram by using data obtained from radiation detection signals delivered from the plurality of radiation detectors.

9. A radiographic inspection apparatus as set forth in claim 7, further including a control device for controlling the moving device.

10. A radiographic inspection apparatus as set forth in claim 7, further including a rotating device for rotating the radiation detecting device around a bed on which a person to be examined is laid.

11. A radiographic inspection apparatus as set forth in claim 7, wherein the collimator device is movably attached to a pair of collimator holding members provided in the radiation detecting device.
12. A radiographic inspection apparatus as set forth in claim 11, wherein all radiation detectors are arranged between the pair of collimator holding members.
13. A radiographic inspection apparatus comprising:
 - a radiation detecting device including a collimator device having shield members defining a plurality of radiation passages, a plurality of radiation detectors for detecting radiation rays passing through the radiation passages, and a moving device for moving the collimator device,
 - a control device for controlling the moving device so as to displace the shield members from a position on a line prolonged from a certain side surface of each of the radiation detectors to a position on a line of another side surface of the radiation detector, and
 - a tomogram forming device for creating a tomogram by using data obtained from radiation detection signals as outputs from the radiation detectors, characterized in that each of the radiation passages has a cross-sectional area in the crossing direction is greater than that of each of the radiation

detectors in that direction.

14. A radiographic inspection apparatus as set forth in claim 13, wherein the radiation detecting device includes a rotating device for rotating the radiation detecting device around a bed on which a person to be examined is laid.

15. A radiographic inspection apparatus as set forth in claim 13, wherein the collimator device is movably attached to a pair of collimator holding members provided in the radiation detecting device.

16. A radiographic inspection apparatus as set forth in claim 15, wherein all radiation detectors are arranged between the pair of collimator holding members.

17. A radiographic inspection apparatus as set forth in claim 13, wherein radiation detection signal processing devices receiving radiation detection signals from the radiation detectors, for delivering the data are provided each for each of the radiation detectors.

18. A radiographic inspection apparatus incorporating a collimator device in which a plurality of radiation passages are defined, a plurality of radiation detectors for detecting radiation rays passing through the radiation passages, and a moving device for moving the plurality of radiation detectors and the collimator device, relative to each other in a direction crossing the center axis of each of the

radiation passages, characterized in that each of the radiation passage has a cross-sectional area in the crossing direction, is greater than that of each of the radiation detectors in that direction.

19. A radiographic inspection method with the use of a radiographic inspection device incorporating a plurality of radiation detectors, and a collimator device in which a plurality of radiation passages are defined, each of the radiation passages has a cross-sectional area in a direction crossing a center axis of each of the radiation passages is greater than that of each of the radiation detectors in that direction, characterized in that

the plurality of radiation detectors detect radiation rays passing through the radiation passages, and

either the plurality of radiation detectors or the collimator device is moved in a direction crossing the center axis of the radiation passage.

20. A radiographic method as set forth in claim 19, wherein the radiation detecting device is rotated around a bed on which an object to be examined is laid.

21. A radiographic method as set forth in claim 19, wherein a tomogram is created from data obtained from the plurality of radiation detectors.

22. A radiographic method as set forth in claim 20, wherein a tomogram is created from data obtained from the plurality of radiation detectors.